

AMENDMENTS TO THE CLAIMS

1-31 (Canceled)

32. (Currently Amended) An apparatus for interrogating an addressable array of multiple features of different moieties, comprising:

- (a) a an adjustable detection angle detector system which has ~~one or more~~ optical axes more than one detector so as to detect different emitted light wavelengths at respective different detection angles with an optical axis aligned at each detection angle; and
- (b) a processor which receives signals from the detector system and correlates the received signals with respective array features.

33. (Original) An apparatus according to claim 32 additionally comprising a light source to provide an interrogating light in response to which the features emit the light of different wavelengths.

34. (Canceled)

35. (Canceled)

36. (Original) An apparatus according to claim 32 additionally comprising a reader to read a code carried by an array unit, and a processor which causes the detector system to detect emitted light at a detection angle based on the read code.

37. (Original) An apparatus according to claim 33 wherein the light source produces a spot of light at the array, the apparatus additionally comprising a scanning system which scans the interrogating light spot across the array.

38. (Currently Amended) An apparatus for interrogating an addressable array of multiple features of different moieties, comprising:

(a) a seat which can retain an array unit carrying the array, in a position for interrogation;

~~(b)~~(a) a detector system which can collect light at multiple different positions around a cone having an apex at a seated array, and

~~(c)~~(b) a processor which receives signals from the detector system and correlates the received signals with respective array features.

Claims 39-42. (Canceled)

43. (New) An apparatus for interrogating an addressable array of multiple features of different moieties, comprising:

(a) an adjustable detection angle detector system having a detector which can be moved to align with different detection angles so as to detect different emitted light wavelengths at respective different detection angles; and

(b) a processor which receives signals from the detector system and correlates the received signals with respective array features.

44. (New) An apparatus according to claim 43 additionally comprising a light source to provide an interrogating light in response to which the features emit the light of different wavelengths.

45. (New) An apparatus according to claim 43 additionally comprising a reader to read a code carried by an array unit, and a processor which causes the detector system to detect emitted light at a detection angle based on the read code.

46. (New) An apparatus according to claim 44 wherein the light source produces a spot of light at the array, the apparatus additionally comprising a scanning system which scans the interrogating light spot across the array.

47. (New) An apparatus for interrogating an addressable array of multiple features of different moieties, comprising:

(a) a detector system having an adjustable detection angle; and

(b) a processor which receives signals from the detector system and correlates the received signals with respective array features.

48. (Original) An apparatus according to claim 47 additionally comprising a light source to provide an interrogating light in response to which the features emit the light of different wavelengths.

49. (Original) An apparatus according to claim 47 wherein the detector system comprises at least one detector with an optical axis which can be moved to align with different detection angles.

50. (New) An apparatus according to claim 49 wherein the detector system comprises multiple detectors positioned at corresponding multiple different detection angles.

51. (New) An apparatus according to claim 49 additionally comprising a reader to read a code carried by an array unit, and a processor which causes the detector system to detect emitted light at a detection angle based on the read code.

52. (New) An apparatus according to claim 49 wherein the light source produces a spot of light at the array, the apparatus additionally comprising a scanning system which scans the interrogating light spot across the array.